

MAR 21 2013

**510(k) Summary
(K130221)**

This summary of 510(K) – safety and effectiveness information is being submitted in accordance with requirements of 21 CFR Part 807.92.

Date: 03/08/2013

1. Submitter

	Submitter
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2. U.S Agent/Contact Person

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3. Device

Trade Name: Hero II Dental Implant System
UI Dental Implant System
Common Name: Dental Implant
Classification Name: Endosseous Dental Implant System
Product Code: DZE, NHA
Classification regulation: 21CFR872.3640

4. Predicate Device:

HERO II and IS Dental Implant System (K121047)
Osseofuse implant system (K110577)

5. Purpose of Submission

The purpose of this Special 510(k) is to add a new design fixture model to the unmodified device (HERO II and IS Dental Implant System (K121047) and to change the name of IS Dental Implant System to UI Dental Implant System. The intended use and the principal technology of the subject device are the same as the unmodified device.

6. Description:

The Hero II Dental Implant System and the UI Dental Implant System are dental implant systems made of Titanium 6AL 4V ELI alloy intended to be surgically placed in the bone of the upper or lower jaw arches for loading after a conventional healing period. The implants may be used to replace one or more missing teeth. The systems are similar to other commercially available products based on the intended use, the technology used, the claims, the material composition employed and performance characteristics. The surface of these systems have been treated with R.B.M (Resorbable Blast Media) for fixtures and TiN coating for abutments. The size information is as below.

Hero-II Fixture

Ø 3.75mm x (L) 8.5mm, 10.0mm, 11.5mm, 13.0mm, & 15mm
 Ø 4.00mm x (L) 8.5mm, 10.0mm, 11.5mm, 13.0mm, & 15mm
 Ø 4.50mm x (L) 8.5mm, 10.0mm, 11.5mm, 13.0mm, & 15mm
 Ø 5.00mm x (L) 8.5mm, 10.0mm, 11.5mm, 13.0mm, & 15mm
 Ø 6.00mm x (L) 8.5mm, 10.0mm, 11.5mm, 13.0mm, & 15mm

UI Fixture

Ø 3.5(Thread diameter) x (L) 8.5mm, 10.0mm, 11.5mm, & 13.0mm
 Ø 4.0 x (L) 7.3mm, 8.5mm, 10.0mm, 11.5mm, & 13.0mm
 Ø 4.5 x (L) 7.3mm, 8.5mm, 10.0mm, 11.5mm, & 13.0mm
 Ø 5.0 x (L) 7.3mm, 8.5mm, 10.0mm, 11.5mm, & 13.0mm
 Ø 6.0 x (L) 7.3mm, 8.5mm, 10.0mm, 11.5mm, & 13.0mm

Abutments

Diameter Ø4mm ~ Ø7mm
 Cuff height 1~4mm
 Height 4~7mm

7. Indication for use:

The Hero II Dental Implant System and the UI Dental Implant System are indicated for use in partially or fully edentulous mandibles and maxillae, in support of single or multiple-unit restorations including; cemented retained, screw retained, or overdenture restorations, and terminal or intermediate abutment support for fixed bridgework. The Hero II Dental Implant System and the UI Dental Implant System are for single and two stage surgical procedures. These systems are intended for

delayed loading.

8. Non-clinical testing

The following nonclinical tests were conducted on the unmodified device and reviewed in the previous 510K submission (K121047). These characteristics have not been changed on the modified device; therefore it is substantially equivalent to the unmodified device in these regards.

- Energy Disperse X-ray micro analyzer (EDX) and Scanning Electron Microscopy (SEM) Analysis to verify cleanness after surface treatment
- Shelf life testing
- Sterilization validation

9. Basis for Substantial Equivalence

The Hero II Dental Implant System and the UI Dental Implant System have the same intended use as the identified predicate device (K121047). The Hero II / UI Dental Implant system and the unmodified devices are the same in fundamental scientific technology in that they are all threaded, root form implants constructed of titanium. They all share same internal hexagon abutment connection system with internal beveled interface. The subject and the unmodified devices are both bone-level implants that share similar body shape design such as straight walled neck and tapered body design.

The difference is the minor thread design on the fixture.

10. Conclusion

The subject devices and the predicate devices have the same intended use and have the same technological characteristics. The subject and the predicate implants are all made of commercially pure titanium and have the same surface treatments.

Overall, the Hero II Dental Implant System and the UI Dental Implant System have the following similarities to the predicate devices:

- * have the same intended use,
- * use the same operating principle,
- * incorporate the same basic design,
- * incorporate the same material.

Based on the similarities, we conclude that the Hero II Dental Implant System and the UI Dental Implant System are substantially equivalent to the predicate devices.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
10903 New Hampshire Avenue
Document Control Center – WO66-G609
Silver Spring, MD 20993-0002

March 21, 2013

Medimecca Company, Limited
C/O Ms. Priscilla Chung
Regulatory Affairs Consulting
LK Consulting Group USA, Incorporated
951 Starbuck Street, Unit J
Fullerton CA 92833

Re: K130221

Trade/Device Name: Hero II Dental Implant System UI Dental Implant System
Regulation Number: 21 CFR 872.3640
Regulation Name: Endosseous Dental Implant
Regulatory Class: II
Product Code: DZE, NHA
Dated: February 14, 2013
Received: February 20, 2013

Dear Ms. Chung:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA).

You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act

or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucml115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

Kwame O. Ulmer for

Anthony D. Watson, B.S., M.S., M.B.A.
Director
Division of Anesthesiology, General Hospital,
Respiratory, Infection Control and
Dental Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

Indications for Use

510(k) Number (if known): K130221

Device Name: Hero II Dental Implant System
UI Dental Implant System

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Prescription Use ✓
(Per 21 CFR 801 Subpart D)

AND

Over-The Counter Use
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)



(Division Sign-Off)

Division of Anesthesiology, General Hospital
Infection Control, Dental Devices

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